

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 57-193051

(43)Date of publication of application : 27.11.1982

(51)Int.Cl.

H01L 23/48

H01L 23/52

H05K 3/40

H05K 3/46

(21)Application number : 56-078959

(71)Applicant : NEC CORP

(22)Date of filing : 25.05.1981

(72)Inventor : INOUE TATSUO

## (54) MULTILAYER CIRCUIT BOARD

## (57)Abstract:

**PURPOSE:** To obtain a multilayer circuit board which can be readily corrected in high density by mounting externally connecting pins on one surface of the ceramic circuit board of multilayer and connecting the pins to the circuit formed in the interior or on the surface of an insulating layer of organic macromolecule on the other surface.

**CONSTITUTION:** A conductive pattern printed on a green sheet is positioned, superposed, baked and solidified to form a laminated ceramic circuit board 30 having a conductive layer 32 and a pad 33. Externally connecting pins 34 made of Kovar alloy are soldered to the board 30. Then, an insulating layer 35 of polyimide series is formed on the board 30, a conductive layer 36 is selectively formed by copper plating, and a multilayer wiring layer is formed repeatedly. Since the layers 35 and 36 can be formed by a low temperature treatment, they can be formed without damaging the mounting of the pins 34, and can be corrected. The layer 36 may be formed in a high density by a photoetching method.

